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Docket No.: C1271.70048US01
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Larry Krepski, R. et al.
Serial No.: 10/595,895
Confirmation No.: 8694
Filed: May 18, 2006
For: HYDROXYLAMINE AND OXIME SUBSTITUTED
IMIDAZOQUINOLINES, IMIDAZOPYRIDINES, AND
IMIDAZONAPHTHYRIDINES
Examiner: D. M. M. Seaman
Art Unit: 1625

Certificate of Mailing Under 37 CFR 1.8(a)

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as First Class Mail, in an envelope addressed to: Attention: PGPUB, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Dated: 11/17/07

Nicole Gaffney
Nicole Gaffney

REQUEST FOR CORRECTED PUBLICATION

Mail Stop PGPUB
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicant in the above-referenced application respectfully requests correction of the corresponding published application US-2007-0099901-A1, published on May 3, 2007.

Claim 2, paragraph 1482 on page 103 of the published version of the application, the expression " ≤ 7 " should be changed to " ≤ 7 ".

Claim 3, paragraph 1482 on page 106 of the published version of the application, the expression "N(OR₈)-" should be changed to "N(OR₉)-".

Claim 3, paragraph 1482 on page 106 of the published version of the application, the expression " ≤ 7 " should be changed to " ≤ 7 ".

Claim 4, paragraph 1482 on page 108 of the published version of the application, the expression " ≤ 7 " should be changed to " ≤ 7 ".

Claim 5, paragraph 1482 on page 111 of the published version of the application, the expression “-N(R₉)-” should be changed to “-N(R₈)-”.

Claim 5, paragraph 1482 on page 111 of the published version of the application, the expression “ ≤ 7 ” should be changed to “ ≤ 7 ”.

Claim 6, paragraph 1482 on page 114 of the published version of the application, the expression “ ≤ 7 ” should be changed to “ ≤ 7 ”.

Claim 25, paragraph 1482 on page 114 of the published version of the application, the expressions “o-tolyl, m-tolyl, p-tolyl” should be changed to “*o*-tolyl, *m*-tolyl, *p*-tolyl”.

Claim 31, paragraph 1482 on page 114 of the published version of the application, “claims” should be replaced with “claim”.

Claim 38, paragraph 1482 on page 115 of the published version of the application, the expressions “o-tolyl, m-tolyl, p-tolyl” should be changed to “*o*-tolyl, *m*-tolyl, *p*-tolyl”.

Claim 48, paragraph 1482 on page 115 of the published version of the application, the expressions “o-tolyl, m-tolyl, p-tolyl” should be changed to “*o*-tolyl, *m*-tolyl, *p*-tolyl”.

Claim 58, paragraph 1482 on page 116 of the published version of the application, the expressions “o-tolyl, m-tolyl, p-tolyl” should be changed to “*o*-tolyl, *m*-tolyl, *p*-tolyl”.

Claim 68, paragraph 1482 on page 116 of the published version of the application, the expressions “o-tolyl, m-tolyl, p-tolyl” should be changed to “*o*-tolyl, *m*-tolyl, *p*-tolyl”.

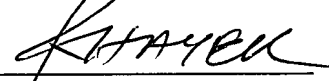
A copy of the claims as published with the marked corrections indicated in red is enclosed for the convenience of the Patent Office. The above errors occurred through no fault of the Applicant.

No fee is required under 37 C.F.R. §1.18(d) for this request. If a fee is required, the Commissioner is hereby authorized to charge any underpayment or overpayment to Deposit Account No. 23/2925.

A prompt and favorable response is earnestly requested.

Dated: November 14, 2007

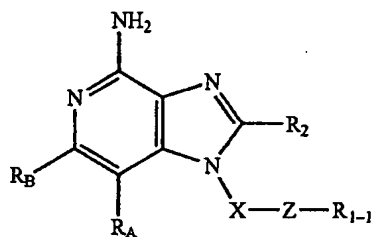
Respectfully submitted,

By 

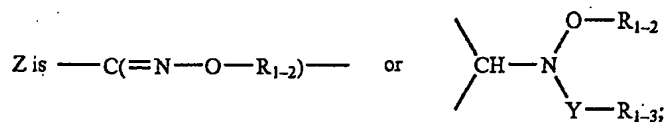
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CLAIMS AS PUBLISHED

1. (canceled)
2. A compound of the Formula (II):



wherein:



X is selected from the group consisting of:

- $\text{—CH(R}_9\text{)—}$,
- $\text{—CH(R}_9\text{)—alkylene—}$, and
- $\text{—CH(R}_9\text{)—alkenylene—}$,

wherein the alkylene and alkenylene are optionally interrupted by one or more —O— groups;

R_{1-1} is selected from the group consisting of:

- hydrogen,
- alkyl,
- aryl,
- alkylene-aryl,
- heteroaryl,
- alkylene-heteroaryl, and

alkyl, aryl, alkylene-aryl, heteroaryl, or alkylene-heteroaryl substituted by one or more substituents selected from the group consisting of:

- halogen,
- cyano,
- nitro,
- alkoxy,
- dialkylamino.

alkylthio,
haloalkyl,
haloalkoxy,
alkyl,
—NH—SO₂—R₁₋₄,
—NH—C(O)—R₁₋₄,
—NH—C(O)—NH₂,
—NH—C(O)—NH—R₁₋₄, and
—N₃;

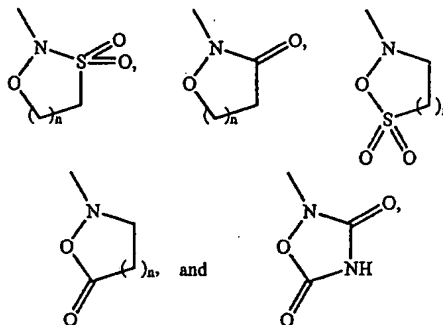
R₁₋₂ and R₁₋₃ are independently selected from the group consisting of:

hydrogen,
alkyl,
alkenyl,
aryl,
arylalkylenyl,
heteroaryl,
heteroarylalkylenyl,
heterocyclyl,
heterocyclalkylenyl, and
alkyl, alkenyl, aryl, arylalkylenyl, heteroaryl, heteroarylalkylenyl, heterocyclyl, or heterocyclalkylenyl, substituted by one or more substituents selected from the group consisting of:

hydroxy,
alkyl,
haloalkyl,
hydroxyalkyl,
alkoxy,
dialkylamino,
—S(O)₀₋₂-alkyl,
—S(O)₀₋₂-aryl,
—NH—S(O)₂-alkyl,
—NH—S(O)₂-aryl,
haloalkoxy,
halogen,
cyano,
nitro,
aryl,
heteroaryl,
heterocyclyl,
aryloxy,
arylalkyleneoxy,
—C(O)—O-alkyl,

—C(O)—N(R₈)₂,
—N(R₈)—C(O)-alkyl,
—O—(CO)-alkyl, and
—C(O)-alkyl;

or the R₁₋₂ and R₁₋₃ groups can join together to form a ring system selected from the group consisting of:



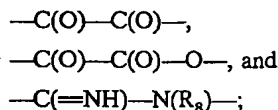
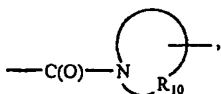
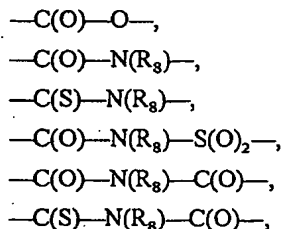
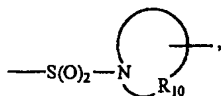
wherein n=0, 1, 2, or 3;

R₁₋₄ is selected from the group consisting of:

alkyl,
aryl,
alkylene-aryl,
heteroaryl,
alkylene-heteroaryl, and
alkyl, aryl, alkylene-aryl, heteroaryl, or alkylene-heteroaryl substituted by one or more substituents selected from the group consisting of:
halogen,
cyano,
nitro,
alkoxy,
dialkylamino,
alkylthio,
haloalkyl,
haloalkoxy,
alkyl, and
—N₃;

Y is selected from the group consisting of:

a bond,
—C(O)—,
—C(S)—,
—S(O)₂—,
—S(O)₂—N(R₈)—,



R_A and R_B are each independently selected from the group consisting of:

hydrogen,
halogen,
alkyl,
alkenyl,
alkoxy,
alkylthio, and
 $\text{---N(R}_9\text{)}_2$;

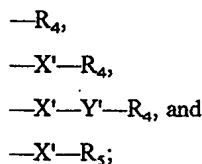
or when taken together, R_A and R_B form a fused aryl ring or heteroaryl ring containing one heteroatom selected from the group consisting of N and S, wherein the aryl or heteroaryl ring is unsubstituted or substituted by one or more R groups, or substituted by one R_3 group, or substituted by one R_3 group and one R group;

or when taken together, R_A and R_B form a fused 5 to 7 membered saturated ring, optionally containing one heteroatom selected from the group consisting of N and S, and unsubstituted or substituted by one or more R groups;

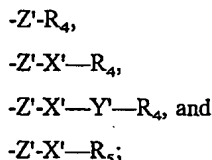
R is selected from the group consisting of:

halogen,
hydroxy,
alkyl,
alkenyl,
haloalkyl,
alkoxy,
alkylthio, and
 $\text{---N(R}_9\text{)}_2$;

R_2 is selected from the group consisting of:

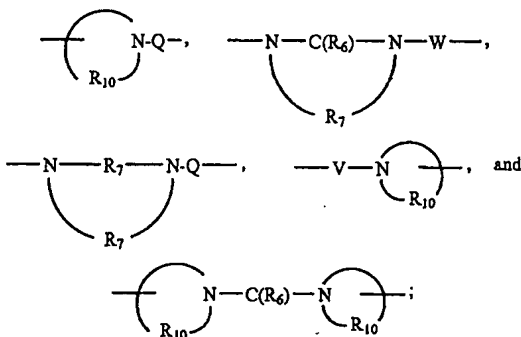
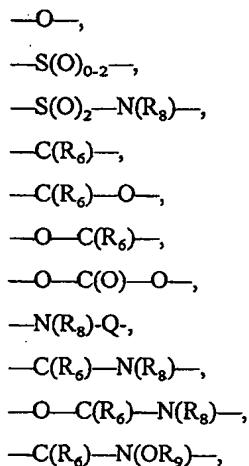


R_3 is selected from the group consisting of:



X' is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclylene, wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or terminated by arylene, heteroarylene or heterocyclylene and optionally interrupted by one or more ---O--- groups;

Y' is selected from the group consisting of:

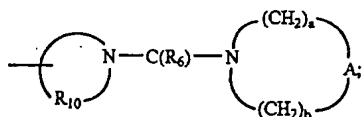
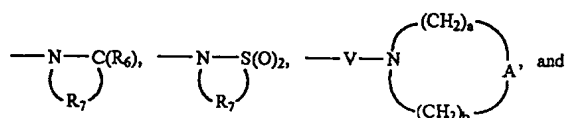


Z' is a bond or ---O--- ;

R_4 is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and

heterocyclyl, wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl, aryloxy, arylalkyleneoxy, heteroaryl, heteroaryloxy, heteroarylalkyleneoxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkyleneoxy, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo;

R_5 is selected from the group consisting of:



R_6 is selected from the group consisting of =O and =S ;

R_7 is C_{2-7} alkylene;

R_8 is selected from the group consisting of hydrogen, C_{1-10} alkyl, C_{2-10} alkenyl, C_{1-10} alkoxy- C_{1-10} alkylenyl, hydroxy- C_{1-10} alkylenyl, heteroaryl- C_{1-10} alkylenyl, and aryl- C_{1-10} alkylenyl;

R_9 is selected from the group consisting of hydrogen and alkyl;

R_{10} is C_{3-8} alkylene;

A is selected from the group consisting of ---O--- , ---C(O)--- , $\text{---S(O)}_{0.2}\text{---}$, $\text{---CH}_2\text{---}$, and $\text{---N(R}_4\text{)---}$;

Q is selected from the group consisting of a bond, $\text{---C(R}_6\text{)---}$, $\text{---C(R}_6\text{)---C(R}_6\text{)---}$, $\text{---S(O)}_2\text{---}$, $\text{---C(R}_6\text{)---N(R}_8\text{)---W---}$, $\text{---S(O)}_2\text{---N(R}_8\text{)---}$, $\text{---C(R}_6\text{)---O---}$, $\text{---C(R}_6\text{)---S---}$, and $\text{---C(R}_6\text{)---N(OR}_9\text{)---}$;

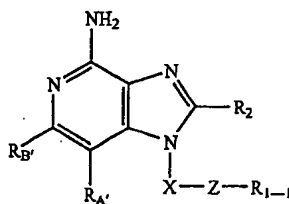
V is selected from the group consisting of $\text{---C(R}_6\text{)---}$, $\text{---O---C(R}_6\text{)---}$, $\text{---N(R}_8\text{)---C(R}_6\text{)---}$, and $\text{---S(O)}_2\text{---}$;

W is selected from the group consisting of a bond, ---C(O)--- , and $\text{---S(O)}_2\text{---}$; and

a and b are each independently integers from 1 to 6 with the proviso that $a+b \leq 7$;

or a pharmaceutically acceptable salt thereof.

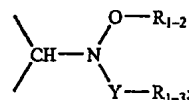
3. A compound of the Formula (III):



III

wherein:

Z is $\text{---C(=N---O---R}_{1-2}\text{)---}$ or



X is selected from the group consisting of:

$\text{---CH(R}_9\text{)---}$,

$\text{---CH(R}_9\text{)---alkylene---}$, and

$\text{---CH(R}_9\text{)---alkenylene---}$,

wherein the alkylene and alkenylene are optionally interrupted by one or more ---O--- groups;

R_{1-1} is selected from the group consisting of:

hydrogen,

alkyl,

aryl,

alkylene-aryl,

heteroaryl,

alkylene-heteroaryl, and

alkyl, aryl, alkylene-aryl, heteroaryl, or alkylene-heteroaryl substituted by one or more substituents selected from the group consisting of:

halogen,

cyano,

nitro,

alkoxy,

dialkylamino,

alkylthio,

haloalkyl,

haloalkoxy,

alkyl,

$\text{---NH---SO}_2\text{---R}_{1-4}$,

$\text{---NH---C(O)---R}_{1-4}$,

$\text{---NH---C(O)---NH}_2$,

—NH—C(O)—NH—R_{1,4}, and

—N₃;

R_{1,2} and R_{1,3} are independently selected from the group consisting of:

hydrogen,

alkyl,

alkenyl,

aryl,

arylalkylenyl,

heteroaryl,

heteroarylalkylenyl,

heterocyclyl,

heterocyclylalkylenyl, and

alkyl, alkenyl, aryl, arylalkylenyl, heteroaryl, heteroarylalkylenyl, heterocyclyl, or heterocyclylalkylenyl, substituted by one or more substituents selected from the group consisting of:

hydroxy,

alkyl,

haloalkyl,

hydroxyalkyl,

alkoxy,

dialkylamino,

—S(O)₀₋₂-alkyl,

—S(O)₀₋₂-aryl,

—NH—S(O)₂-alkyl,

—NH—S(O)₂-aryl,

haloalkoxy,

halogen,

cyano,

nitro,

aryl,

heteroaryl,

heterocyclyl,

aryloxy,

arylalkyleneoxy,

—C(O)—O-alkyl,

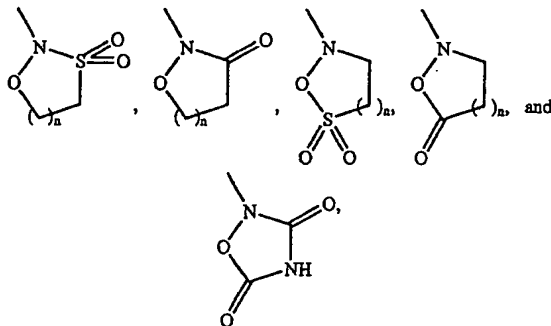
—C(O)—N(R₈)₂,

—N(R₈)—C(O)-alkyl,

—O—(CO)-alkyl, and

—C(O)-alkyl;

or the R_{1,2} and R_{1,3} groups can join together to form a ring system selected from the group consisting of:



wherein n=0, 1, 2, or 3;

R_{1,4} is selected from the group consisting of:

alkyl;

aryl;

alkylene-aryl;

heteroaryl;

alkylene-heteroaryl; and

alkyl, aryl, alkylene-aryl, heteroaryl, or alkylene-heteroaryl substituted by one or more substituents selected from the group consisting of:

halogen,

cyano,

nitro,

alkoxy,

dialkylamino,

alkylthio,

haloalkyl,

haloalkoxy,

alkyl, and

—N₃;

Y is selected from the group consisting of:

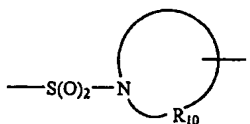
a bond,

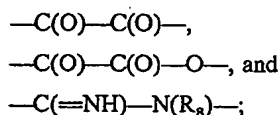
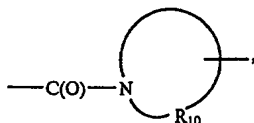
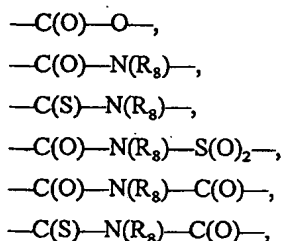
—C(O)—,

—C(S)—,

—S(O)₂—,

—S(O)₂—N(R₈)—,





R_A and R_B are each independently selected from the group consisting of:

hydrogen,
halogen,
alkyl,
alkenyl,
alkoxy,
alkylthio, and
 $-\text{N}(\text{R}_9)_2$;

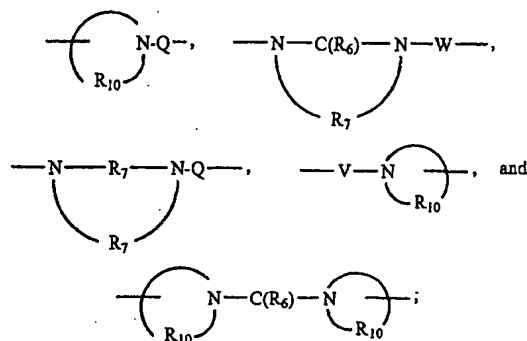
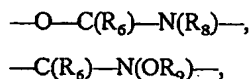
R_2 is selected from the group consisting of:

$-\text{R}_4$,
 $-\text{X}'-\text{R}_4$,
 $-\text{X}'-\text{Y}'-\text{R}_4$, and
 $-\text{X}'-\text{R}_5$;

X' is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclylene, wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or terminated by arylene, heteroarylene or heterocyclylene or optionally interrupted by one or more $-\text{O}-$ groups;

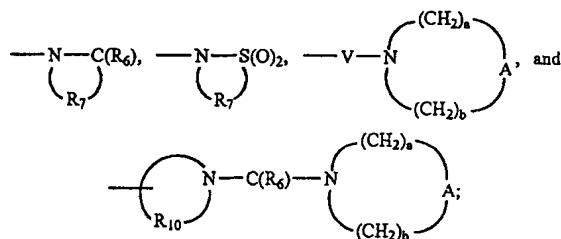
Y' is selected from the group consisting of:

$-\text{O}-$,
 $-\text{S}(\text{O})_{0-2}-$,
 $-\text{S}(\text{O})_2-\text{N}(\text{R}_8)-$,
 $-\text{C}(\text{R}_6)-$,
 $-\text{C}(\text{R}_6)-\text{O}-$,
 $-\text{O}-\text{C}(\text{R}_6)-$,
 $-\text{O}-\text{C}(\text{O})-\text{O}-$,
 $-\text{N}(\text{R}_8)-\text{Q}-$,
 $-\text{C}(\text{R}_6)-\text{N}(\text{R}_8)-$,



R_4 is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl, wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl, aryloxy, arylalkyleneoxy, heteroaryl, heteroaryloxy, heteroarylalkyleneoxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkyleneoxy, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo;

R_5 is selected from the group consisting of:



R_6 is selected from the group consisting of $=\text{O}$ and $=\text{S}$;

R_7 is C_{2-7} alkylene;

R_8 is selected from the group consisting of hydrogen, C_{1-10} alkyl, C_{2-10} alkenyl, C_{1-10} alkoxy- C_{1-10} alkyl, hydroxy- C_{1-10} alkyl, heteroaryl- C_{1-10} alkyl, and aryl- C_{1-10} alkyl;

R_9 is selected from the group consisting of hydrogen and alkyl;

R_{10} is C_{3-8} alkylene;

A is selected from the group consisting of $-\text{O}-$, $-\text{C}(\text{O})-$, $-\text{S}(\text{O})_{0-2}-$, $-\text{CH}_2-$, and $-\text{N}(\text{R}_4)-$;

Q is selected from the group consisting of a bond, $-\text{C}(\text{R}_6)-$, $-\text{C}(\text{R}_6)-\text{C}(\text{R}_6)-$, $-\text{S}(\text{O})_2-$, $-\text{C}(\text{R}_6)-\text{N}(\text{R}_8)-\text{W}-$, $-\text{S}(\text{O})_2-\text{N}(\text{R}_8)-$, $-\text{C}(\text{R}_6)-\text{O}-$, $-\text{C}(\text{R}_6)-\text{S}-$, and $-\text{C}(\text{R}_6)-\text{N}(\text{OR}_8)-$;

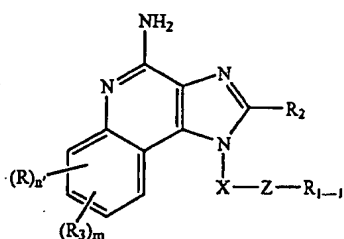
V is selected from the group consisting of $-\text{C}(\text{R}_6)-$, $-\text{O}-\text{C}(\text{R}_6)-$, $-\text{N}(\text{R}_9)-\text{C}(\text{R}_6)-$, and $-\text{S}(\text{O})_2-$;

W is selected from the group consisting of a bond, $-\text{C}(\text{O})-$, and $-\text{S}(\text{O})_2-$; and

a and b are independently integers from 1 to 6 with the proviso that $a+b \leq 7$;

or a pharmaceutically acceptable salt thereof.

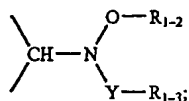
4. A compound of the Formula (IV):



IV

wherein:

Z is $-\text{C}(=\text{N}-\text{O}-\text{R}_{1-2})-$ or



X is selected from the group consisting of:

$-\text{CH}(\text{R}_9)-$,

$-\text{CH}(\text{R}_9)-\text{alkylene}-$, and

$-\text{CH}(\text{R}_9)-\text{alkenylene}-$,

wherein the alkylene and alkenylene are optionally interrupted by one or more $-\text{O}-$ groups;

R_{1-1} is selected from the group consisting of:

hydrogen,

alkyl,

aryl,

alkylene-aryl,

heteroaryl,

alkylene-heteroaryl, and

alkyl, aryl, alkylene-aryl, heteroaryl, or alkylene-heteroaryl substituted by one or more substituents selected from the group consisting of:

halogen;

cyano,

nitro,

alkoxy,

dialkylamino,

alkylthio,

haloalkyl,

haloalkoxy,

alkyl,

$-\text{NH}-\text{SO}_2-\text{R}_{1-4}$,

$-\text{NH}-\text{C}(\text{O})-\text{R}_{1-4}$,

$-\text{NH}-\text{C}(\text{O})-\text{NH}_2$,

$-\text{NH}-\text{C}(\text{O})-\text{NH}-\text{R}_{1-4}$, and

$-\text{N}_3$;

R_{1-2} and R_{1-3} are independently selected from the group consisting of:

hydrogen,

alkyl,

alkenyl,

aryl,

arylalkylenyl,

heteroaryl,

heteroarylalkylenyl,

heterocyclyl,

heterocyclylalkylenyl, and

alkyl, alkenyl, aryl, arylalkylenyl, heteroaryl, heteroarylalkylenyl, heterocyclyl, or heterocyclylalkylenyl, substituted by one or more substituents selected from the group consisting of:

hydroxy,

alkyl,

haloalkyl,

hydroxyalkyl,

alkoxy,

dialkylamino,

$-\text{S}(\text{O})_{0-2}-\text{alkyl}$,

$-\text{S}(\text{O})_{0-2}-\text{aryl}$,

$-\text{NH}-\text{S}(\text{O})_2-\text{alkyl}$,

$-\text{NH}-\text{S}(\text{O})_2-\text{aryl}$,

haloalkoxy,

halogen,

cyano,

nitro,

aryl,

heteroaryl,

heterocyclyl,

aryloxy,

arylalkyleneoxy,

—C(O)—O-alkyl,

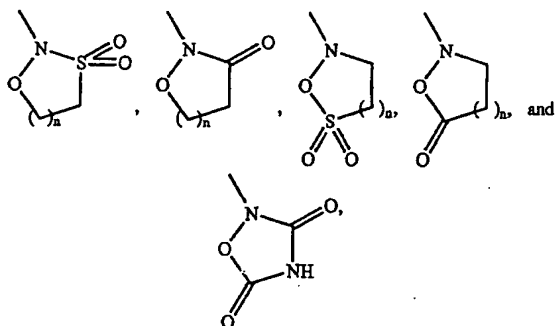
—C(O)—N(R₈)₂,

—N(R₈)—C(O)-alkyl,

—O—(CO)-alkyl, and

—C(O)-alkyl;

or the R_{1,2} and R_{1,3} groups can join together to form a ring system selected from the group consisting of:



wherein n=0, 1, 2, or 3;

R₁₋₄ is selected from the group consisting of:

alkyl,

aryl,

alkylene-aryl,

heteroaryl,

alkylene-heteroaryl, and

alkyl, aryl, alkylene-aryl, heteroaryl, or alkylene-heteroaryl substituted by one or more substituents selected from the group consisting of:

halogen,

cyano,

nitro,

alkoxy,

dialkylamino,

alkylthio,

haloalkyl,

haloalkoxy,

alkyl, and

—N₃;

Y is selected from the group consisting of:

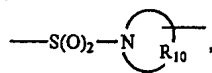
a bond,

—C(O)—,

—C(S)—,

—S(O)₂—,

—S(O)₂—N(R₈)—,



—C(O)—O—,

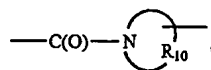
—C(O)—N(R₈)—,

—C(S)—N(R₈)—,

—C(O)—N(R₈)—S(O)₂—,

—C(O)—N(R₈)—C(O)—,

—C(S)—N(R₈)—C(O)—,



—C(O)—C(O)—,

—C(O)—C(O)—O—, and

—C(=NH)—N(R₈)—;

R is selected from the group consisting of:

halogen,

hydroxy,

alkyl,

alkenyl,

haloalkyl,

alkoxy,

alkylthio, and

—N(R₉)₂;

R₂ is selected from the group consisting of:

—R₄,

—X'—R₄,

—X'—Y'—R₄, and

—X'—R₅;

R₃ is selected from the group consisting of:

—Z'—R₄,

—Z'—X'—R₄,

—Z'—X'—Y'—R₄, and

—Z'—X'—R₅;

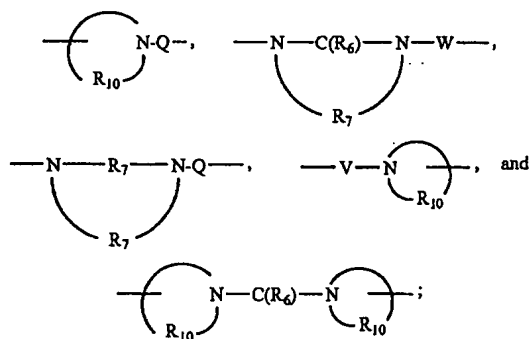
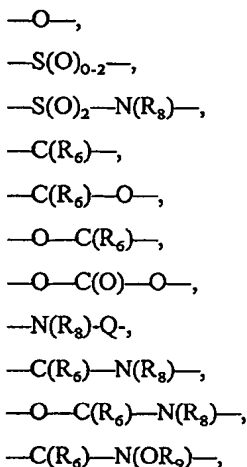
n' is an integer from 0 to 4;

m is 0 or 1; with the proviso that when m is 1, then n' is 0 or 1;

X' is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclylene, wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or

terminated by arylene, heteroarylene or heterocyclylene and optionally interrupted by one or more —O— groups;

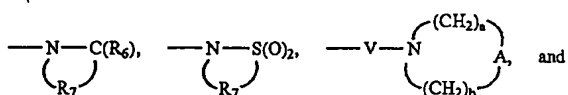
Y' is selected from the group consisting of:



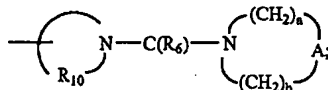
Z is a bond or —O—;

R₄ is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl, wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl, aryloxy, arylalkyleneoxy, heteroaryl, heteroaryloxy, heteroarylalkyleneoxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkyleneoxy, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo;

R_5 is selected from the group consisting of



-continued



R_6 is selected from the group consisting of $=O$ and $=S$;

R₇ is C₂₋₇ alkylene;

R₈ is selected from the group consisting of hydrogen, C₁₋₁₀ alkyl, C₂₋₁₀ alkenyl, C₁₋₁₀ alkoxy-C₁₋₁₀ alkylenyl, hydroxy-C₁₋₁₀ alkylenyl, heteroaryl-C₁₋₁₀ alkylenyl, and aryl-C₁₋₁₀ alkylenyl;

R_9 is selected from the group consisting of hydrogen and alkyl;

R₁₀ is C₃₋₈ alkylene;

A is selected from the group consisting of —O— , —C(O)— , $\text{—S(O)}_{0-2}\text{—}$, $\text{—CH}_2\text{—}$, and $\text{—N(R}_4\text{)—}$;

Q is selected from the group consisting of a bond, $-\text{C}(\text{R}_6)-$, $-\text{C}(\text{R}_6)-\text{C}(\text{R}_6)-$, $-\text{S}(\text{O})_2-$, $-\text{C}(\text{R}_6)-\text{N}(\text{R}_8)-\text{W}-$, $-\text{S}(\text{O})_2-\text{N}(\text{R}_8)-$, $-\text{C}(\text{R}_6)-\text{O}-$, $-\text{C}(\text{R}_6)-\text{S}-$, and $-\text{C}(\text{R}_6)-\text{N}(\text{OR}_9)-$;

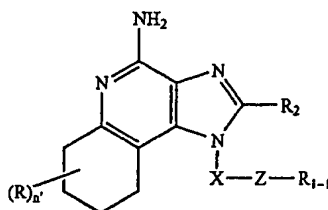
V is selected from the group consisting of $-\text{C}(\text{R}_6)-$, $-\text{O}-\text{C}(\text{R}_6)-$, $-\text{N}(\text{R}_8)-\text{C}(\text{R}_6)-$, and $-\text{S}(\text{O})_2-$;

W is selected from the group consisting of a bond, $-\text{C}(\text{O})-$, and $-\text{S}(\text{O})_2-$; and

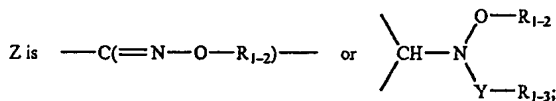
a and b are each independently integers from 1 to 6 with the proviso that $a+b \leq 7$;

or a pharmaceutically acceptable salt thereof.

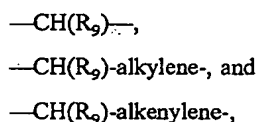
5. A compound of the Formula (V):



wherein:



X is selected from the group consisting of:



wherein the alkylene and alkenylene are optionally interrupted by one or more —O— groups;

R_{1-1} is selected from the group consisting of:

hydrogen,

alkyl,

aryl,

alkylene-aryl,

heteroaryl,

alkylene-heteroaryl, and

alkyl, aryl, alkylene-aryl, heteroaryl, or alkylene-heteroaryl substituted by one or more substituents selected from the group consisting of:

halogen,

cyano,

nitro,

alkoxy,

dialkylamino,

alkylthio,

haloalkyl,

haloalkoxy,

alkyl,

—NH—SO₂— R_{1-4} ,

—NH—C(O)— R_{1-4} ,

—NH—C(O)—NH₂,

—NH—C(O)—NH— R_{1-4} , and

—N₃;

R_{1-2} and R_{1-3} are independently selected from the group consisting of:

hydrogen,

alkyl,

alkenyl,

aryl,

arylalkylenyl,

heteroaryl,

heteroarylalkylenyl,

heterocyclyl,

heterocyclylalkylenyl, and

alkyl, alkenyl, aryl, arylalkylenyl, heteroaryl, heteroarylalkylenyl, heterocyclyl, or heterocyclylalkylenyl, substituted by one or more substituents selected from the group consisting of:

hydroxy,

alkyl,

haloalkyl,

hydroxyalkyl,

alkoxy,

dialkylamino,

—S(O)₀₋₂-alkyl,

—S(O)₀₋₂-aryl,

—NH—S(O)₂-alkyl,

—NH—S(O)₂-aryl,

haloalkoxy,

halogen,

cyano,

nitro,

aryl,

heteroaryl,

heterocyclyl,

aryloxy,

arylalkyleneoxy,

—C(O)—O-alkyl,

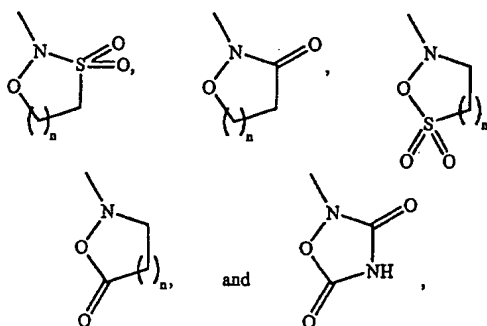
—C(O)—N(R_8)₂,

—N(R_8)—C(O)-alkyl,

—O—(CO)-alkyl, and

—C(O)-alkyl;

or the R_{1-2} and R_{1-3} groups can join together to form a ring system selected from the group consisting of:



wherein $n=0, 1, 2$, or 3 ;

R_{1-4} is selected from the group consisting of:

alkyl,

aryl,

alkylene-aryl,

heteroaryl,

alkylene-heteroaryl, and

alkyl, aryl, alkylene-aryl, heteroaryl, or alkylene-heteroaryl substituted by one or more substituents selected from the group consisting of:

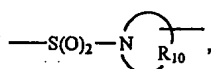
halogen,

cyano,

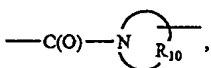
nitro,
alkoxy,
dialkylamino,
alkylthio,
haloalkyl,
haloalkoxy,
alkyl, and
—N₃;

Y is selected from the group consisting of:

a bond,
—C(O)—,
—C(S)—,
—S(O)₂—,
—S(O)₂—N(R₈)—,



—C(O)—O—,
—C(O)—N(R₈)—,
—C(S)—N(R₈)—,
—C(O)—N(R₈)—S(O)₂—,
—C(O)—N(R₈)—C(O)—,
—C(S)—N(R₈)—C(O)—,



—C(O)—C(O)—,
—C(O)—C(O)—O—, and
—C(=NH)—N(R₈)—;

R is selected from the group consisting of:

halogen,
hydroxy,
alkyl,
alkenyl,
haloalkyl,
alkoxy,
alkylthio, and
—N(R₉)₂;

R₂ is selected from the group consisting of:

—R₄,
—X'—R₄,

—X'—Y'—R₄, and

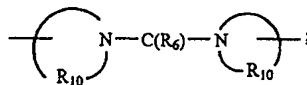
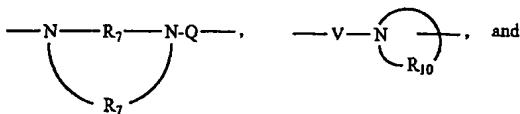
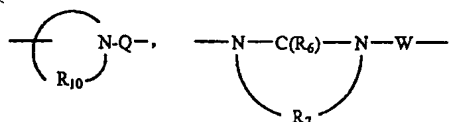
—X'—R₅;

n' is an integer from 0 to 4;

X' is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclylene, wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or terminated by arylene, heteroarylene or heterocyclylene and optionally interrupted by one or more —O— groups;

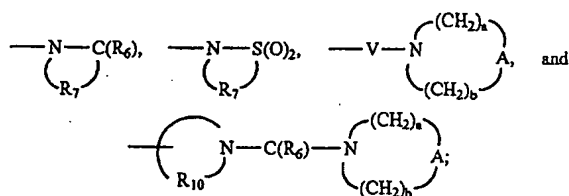
Y' is selected from the group consisting of:

—O—,
—S(O)₀₋₂—,
—S(O)₂—N(R₈)—,
—C(R₆)—,
—C(R₆)—O—,
—O—C(R₆)—,
—O—C(O)—O—,
—N(R₈)—Q—,
—C(R₆)—N(R₈)—,
—O—C(R₆)—N(R₈)—,
—C(R₆)—N(OR₉)—,



R₄ is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl, wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl, aryloxy, arylalkyleneoxy, heteroaryl, heteroaryloxy, heteroarylalkyleneoxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkyleneoxy, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo;

R_3 is selected from the group consisting of



R_6 is selected from the group consisting of =O and =S ;

R_7 is C_{2-7} alkylene;

R_8 is selected from the group consisting of hydrogen, C_{1-10} alkyl, C_{2-10} alkenyl, C_{1-10} alkoxy- C_{1-10} alkyl, hydroxy- C_{1-10} alkyl, heteroaryl- C_{1-10} alkyl, and aryl- C_{1-10} alkyl;

R_9 is selected from the group consisting of hydrogen and alkyl;

R_{10} is C_{3-8} alkylene;

A is selected from the group consisting of ---O--- , ---C(O)--- , $\text{---S(O)}_{0-2}\text{---}$, $\text{---CH}_2\text{---}$, and $\text{---N(R}_4\text{)---}$;

Q is selected from the group consisting of a bond, $\text{---C(R}_6\text{)---}$, $\text{---C(R}_6\text{)---C(R}_6\text{)---}$, $\text{---S(O)}_2\text{---}$, $\text{---C(R}_6\text{)---N(R}_8\text{)---W---}$, $\text{---S(O)}_2\text{---N(R}_8\text{)---}$, $\text{---C(R}_6\text{)---O---}$, $\text{---C(R}_6\text{)---S---}$, and $\text{---C(R}_6\text{)---N(OR}_8\text{)---}$;

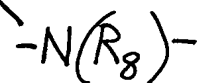
V is selected from the group consisting of $\text{---C(R}_6\text{)---}$, $\text{---O---C(R}_6\text{)---}$, $\text{---N(R}_9\text{)---C(R}_6\text{)---}$, and $\text{---S(O)}_2\text{---}$;

W is selected from the group consisting of a bond, ---C(O)--- , and $\text{---S(O)}_2\text{---}$; and

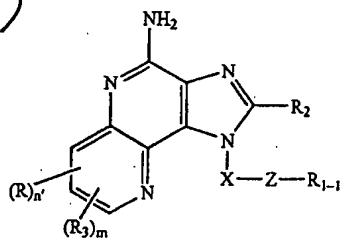
a and b are independently integers from 1 to 6 with the proviso that $a+b \leq 7$;

or a pharmaceutically acceptable salt thereof.

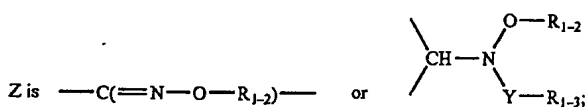
6. A compound of the Formula (VI):



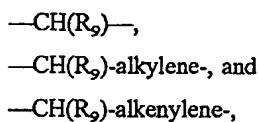
VI



wherein:



X is selected from the group consisting of:



wherein the alkylene and alkenylene are optionally interrupted by one or more ---O--- groups;

R_{1-1} is selected from the group consisting of:

hydrogen,

alkyl,

aryl,

alkylene-aryl,

heteroaryl,

alkylene-heteroaryl, and

alkyl, aryl, alkylene-aryl, heteroaryl, or alkylene-heteroaryl substituted by one or more substituents selected from the group consisting of:

halogen,

cyano,

nitro,

alkoxy,

dialkylamino,

alkylthio,

haloalkyl,

haloalkoxy,

alkyl,

$\text{---NH---SO}_2\text{---R}_{1-4}$,

$\text{---NH---C(O)---R}_{1-4}$,

$\text{---NH---C(O)---NH}_2$,

$\text{---NH---C(O)---NH---R}_{1-4}$, and

---N_3 ;

R_{1-2} and R_{1-3} are independently selected from the group consisting of:

hydrogen,

alkyl,

alkenyl,

aryl,

arylalkenyl,

heteroaryl,

heteroarylalkenyl,

heterocyclyl,

heterocyclylalkenyl, and

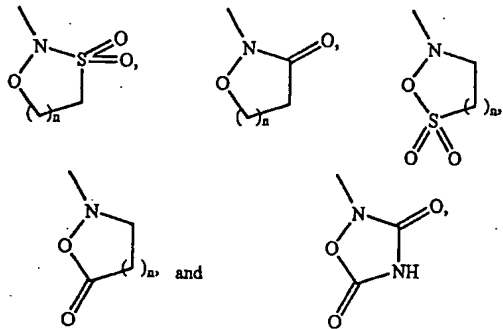
alkyl, alkenyl, aryl, arylalkenyl, heteroaryl, heteroarylalkenyl, heterocyclyl, or heterocyclylalkyl-

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lenyl, substituted by one or more substituents selected from the group consisting of:

hydroxy,
alkyl,
haloalkyl,
hydroxyalkyl,
alkoxy,
dialkylamino,
—S(O)₀₋₂-alkyl,
—S(O)₀₋₂-aryl,
—NH—S(O)₂-alkyl,
—NH—S(O)₂-aryl,
haloalkoxy,
halogen,
cyano,
nitro,
aryl,
heteroaryl,
heterocyclyl,
aryloxy,
arylalkyleneoxy,
—C(O)—O-alkyl,
—C(O)—N(R₈)₂,
—N(R₈)—C(O)-alkyl,
—O—(CO)-alkyl, and
—C(O)-alkyl;

or the R₁₋₂ and R₁₋₃ groups can join together to form a ring system selected from the group consisting of:



wherein n=0, 1, 2, or 3;

R₁₋₄ is selected from the group consisting of:

alkyl,
aryl,
alkylene-aryl,

heteroaryl,

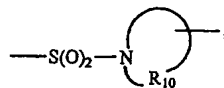
alkylene-heteroaryl, and

alkyl, aryl, alkylene-aryl, heteroaryl, or alkylene-heteroaryl substituted by one or more substituents selected from the group consisting of:

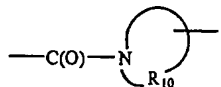
halogen,
cyano,
nitro,
alkoxy,
dialkylamino,
alkylthio,
haloalkyl,
haloalkoxy,
alkyl, and
—N₃;

Y is selected from the group consisting of:

a bond,
—C(O)—,
—C(S)—,
—S(O)₂—,
—S(O)₂—N(R₈)—,



—C(O)—O—,
—C(O)—N(R₈)—,
—C(S)—N(R₈)—,
—C(O)—N(R₈)—S(O)₂—,
—C(O)—N(R₈)—C(O)—,
—C(S)—N(R₈)—C(O)—,



—C(O)—C(O)—,
—C(O)—C(O)—O—, and
—C(=NH)—N(R₈)—;

R is selected from the group consisting of:

halogen,
hydroxy,
alkyl,

alkenyl,
haloalkyl,
alkoxy,
alkylthio, and

$-\text{N}(\text{R}_9)_2$;

R_2 is selected from the group consisting of:

$-\text{R}_4$,
 $-\text{X}'-\text{R}_4$,
 $-\text{X}'-\text{Y}'-\text{R}_4$, and
 $-\text{X}'-\text{R}_5$;

R_3 is selected from the group consisting of:

$-\text{Z}'-\text{R}_4$,
 $-\text{Z}'-\text{X}'-\text{R}_4$,
 $-\text{Z}'-\text{X}'-\text{Y}'-\text{R}_4$, and
 $-\text{Z}'-\text{X}'-\text{R}_5$;

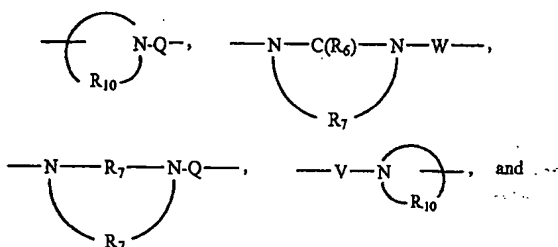
n' is an integer from 0 to 4;

m is 0 or 1; with the proviso that when m is 1, then n' is 0 or 1;

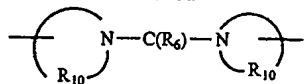
X' is selected from the group consisting of alkylene, alkenylene, alkynylene, arylene, heteroarylene, and heterocyclylene, wherein the alkylene, alkenylene, and alkynylene groups can be optionally interrupted or terminated by arylene, heteroarylene or heterocyclylene and optionally interrupted by one or more $-\text{O}-$ groups;

Y' is selected from the group consisting of:

$-\text{O}-$,
 $-\text{S}(\text{O})_{0-2}-$,
 $-\text{S}(\text{O})_2-\text{N}(\text{R}_8)-$,
 $-\text{C}(\text{R}_6)-$,
 $-\text{C}(\text{R}_6)-\text{O}-$,
 $-\text{O}-\text{C}(\text{R}_6)-$,
 $-\text{O}-\text{C}(\text{O})-\text{O}-$,
 $-\text{N}(\text{R}_8)-\text{Q}-$,
 $-\text{C}(\text{R}_6)-\text{N}(\text{R}_8)-$,
 $-\text{O}-\text{C}(\text{R}_6)-\text{N}(\text{R}_8)-$,
 $-\text{C}(\text{R}_6)-\text{N}(\text{OR}_9)-$,



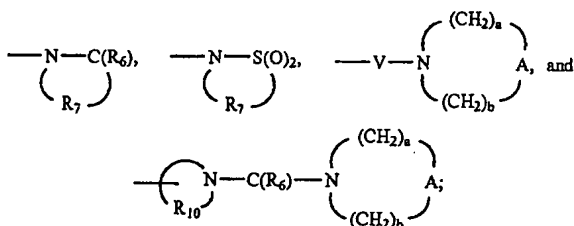
-continued



Z' is a bond or $-\text{O}-$;

R_4 is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl, wherein the alkyl, alkenyl, alkynyl, aryl, arylalkylenyl, aryloxyalkylenyl, alkylarylenyl, heteroaryl, heteroarylalkylenyl, heteroaryloxyalkylenyl, alkylheteroarylenyl, and heterocyclyl groups can be unsubstituted or substituted by one or more substituents independently selected from the group consisting of alkyl, alkoxy, hydroxyalkyl, haloalkyl, haloalkoxy, halogen, nitro, hydroxy, mercapto, cyano, aryl, aryloxy, arylalkyleneoxy, heteroaryl, heteroaryloxy, heteroarylalkyleneoxy, heterocyclyl, amino, alkylamino, dialkylamino, (dialkylamino)alkyleneoxy, and in the case of alkyl, alkenyl, alkynyl, and heterocyclyl, oxo;

R_5 is selected from the group consisting of



R_6 is selected from the group consisting of $=\text{O}$ and $=\text{S}$;

R_7 is C_{2-7} alkylene;

R_8 is selected from the group consisting of hydrogen, C_{1-9} alkyl, C_{2-10} alkenyl, C_{1-10} alkoxy- C_{1-10} alkylenyl, hydroxy- C_{1-9} alkylenyl, heteroaryl- C_{1-10} alkylenyl, and aryl- C_{1-10} alkylenyl;

R_9 is selected from the group consisting of hydrogen and alkyl;

R_{10} is C_{3-8} alkylene;

A is selected from the group consisting of $-\text{O}-$, $-\text{C}(\text{O})-$, $-\text{S}(\text{O})_{0-2}-$, $-\text{CH}_2-$, and $-\text{N}(\text{R}_4)-$;

Q is selected from the group consisting of a bond, $-\text{C}(\text{R}_6)-$, $-\text{C}(\text{R}_6)-\text{C}(\text{R}_6)-$, $-\text{S}(\text{O})_2-$, $-\text{C}(\text{R}_6)-\text{N}(\text{R}_8)-\text{W}-$, $-\text{S}(\text{O})_2-\text{N}(\text{R}_8)-$, $-\text{C}(\text{R}_6)-\text{O}-$, $-\text{C}(\text{R}_6)-\text{S}-$, and $-\text{C}(\text{R}_6)-\text{N}(\text{OR}_9)-$;

V is selected from the group consisting of $-\text{C}(\text{R}_6)-$, $-\text{O}-\text{C}(\text{R}_6)-$, $-\text{N}(\text{R}_8)-\text{C}(\text{R}_6)-$, and $-\text{S}(\text{O})_2-$;

W is selected from the group consisting of a bond, $-\text{C}(\text{O})-$, and $-\text{S}(\text{O})_2-$; and

a and b are each independently integers from 1 to 6 with the proviso that $a+b \leq 7$; ≤ 7

or a pharmaceutically acceptable salt thereof.

7-8. (canceled)

9. The compound or salt of claim 3 wherein R_A and R_B are both methyl.

10-11. (canceled)

12. The compound or salt of claim 2, wherein R_A and R_B form a fused aryl ring or heteroaryl ring containing one N, wherein the aryl or heteroaryl ring is unsubstituted or substituted by one or more R groups, or substituted by one R_3 group, or substituted by one R_3 group and one R group.

13. The compound or salt of claim 2 wherein R_A and R_B form a fused 5 to 7 membered saturated ring, which may optionally contain one N, wherein the saturated ring is unsubstituted or substituted by one or more R groups.

14. The compound or salt of claim 4 wherein m is 0.

15. The compound or salt of claim 4 wherein n' is 0.

16. The compound or salt of claim 14 wherein m and n' are both 0.

17. The compound or salt of claim 4, wherein R_3 is selected from the group consisting of pyridin-3-yl, pyridin-4-yl, 5-(hydroxymethyl)pyridin-3-yl, and 2-ethoxyphenyl.

18. The compound or salt of claim 2, wherein R_2 is selected from the group consisting of:

hydrogen,

alkyl,

alkenyl,

aryl,

heteroaryl,

heterocyclyl,

alkylene- Y'' -alkyl,

alkylene- Y'' -aryl, and

alkyl or alkenyl substituted by one or more substituents selected from the group consisting of:

hydroxy,

halogen,

$-N(R_{11})_2$,

$-C(O)-C_{1-10}$ alkyl,

$-C(O)-O-C_{1-10}$ alkyl,

$-N(R_{11})-C(O)-C_{1-10}$ alkyl,

aryl,

heteroaryl,

heterocyclyl,

$-C(O)$ -aryl, and

$-C(O)$ -heteroaryl;

wherein:

Y'' is $-O-$ or $-S(O)_{0-2}-$; and

R_{11} is selected from the group consisting of hydrogen, C_{1-10} alkyl, and C_{2-10} alkenyl.

19. The compound or salt of claim 18 wherein R_2 is selected from the group consisting of hydrogen, hydroxymethyl, C_{1-4} alkyl, and C_{1-4} alkyl- $O-C_{1-4}$ alkylenyl.

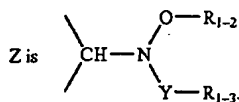
20. The compound or salt of claim 2 wherein X is selected from the group consisting of $-(CH_2)_{1-6}-$, $-CH_2C(CH_3)_2-$, $-CH_2C(CH_3)_2CH_2-$, $-(CH_2)_2OCH_2-$, and $-(CH_2)_3OCH_2-$.

21. The compound or salt of claim 2 wherein R_{1-1} is selected from the group consisting of hydrogen, C_{1-4} alkyl, and phenyl.

22. The compound or salt of claim 2 wherein R_{1-2} is selected from the group consisting of hydrogen, C_{1-4} alkyl, benzyl, and pyridin-2-ylmethyl.

23. The compound or salt of claim 2 wherein Z is $-C(=N-O-R_{1-2})-$.

24. The compound or salt of claim 2 wherein



25. The compound or salt of claim 2 wherein R_{1-3} is selected from the group consisting of hydrogen, C_{1-6} alkyl, 1-pyrrolidinyl, phenyl, 2-chlorophenyl, 3-chlorophenyl, 4-chlorophenyl, *o*-tolyl, *m*-tolyl, *p*-tolyl, and pyridin-3-yl.

26. The compound or salt of claim 2 or 25 wherein Y is selected from the group consisting of:

$-C(O)-$,

$-C(O)-O-$,

$-S(O)_2-$,

$-C(O)-N(R_8)-$, and

$-C(S)-N(R_8)-$.

27. The compound or salt of claim 26 wherein R_8 is H or CH_3 .

28. A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 2 in combination with a pharmaceutically acceptable carrier.

29. A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of claim 2 to the animal.

30. A method of treating a viral disease in an animal in need thereof comprising administering a therapeutically effective amount of a compound or salt of claim 2 to the animal.

31. A method of treating a neoplastic disease in an animal in need thereof comprising administering a therapeutically effective amount of a compound or salt of claims 2 to the animal.

32. The compound or salt of claim 3 wherein R_2 is selected from the group consisting of hydrogen, hydroxymethyl, C_{1-4} alkyl, and C_{1-4} alkyl- $O-C_{1-4}$ alkylenyl.

33. The compound or salt of claim 3 wherein X is selected from the group consisting of $-(CH_2)_{1-6}-$, $-CH_2C(CH_3)_2-$, $-CH_2C(CH_3)_2CH_2-$, $-(CH_2)_2OCH_2-$, and $-(CH_2)_3OCH_2-$.

34. The compound or salt of claim 3 wherein R_{1-1} is selected from the group consisting of hydrogen, C_{1-4} alkyl, and phenyl.

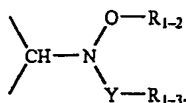
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claim

35. The compound or salt of claim 3 wherein $R_{1,2}$ is selected from the group consisting of hydrogen, C_{1-4} alkyl, benzyl, and pyridin-2-ylmethyl.

36. The compound or salt of claim 3 wherein Z is $-C(=N-O-R_{1,2})-$.

37. The compound or salt of claim 3 wherein Z is



38. The compound or salt of claim 3 wherein $R_{1,3}$ is selected from the group consisting of hydrogen, C_{1-6} alkyl, 1-pyrrolidinyl, phenyl, 2-chlorophenyl, 3-chlorophenyl, 4-chlorophenyl, *o*-tolyl, *m*-tolyl, *p*-tolyl, and pyridin-3-yl.

39. The compound or salt of claim 3 wherein Y is selected from the group consisting of:

- $-C(O)-$,
- $-C(O)-O-$,
- $-S(O)_2-$,
- $-C(O)-N(R_8)-$, and
- $-C(S)-N(R_8)-$.

40. The compound or salt of claim 39 wherein R_8 is H or CH_3 .

41. The compound or salt of claim 4 wherein R_2 is selected from the group consisting of:

- hydrogen,
- alkyl,
- alkenyl,
- aryl,
- heteroaryl,
- heterocyclyl,
- alkylene- Y'' -alkyl,
- alkylene- Y'' -aryl, and

alkyl or alkenyl substituted by one or more substituents selected from the group consisting of:

- hydroxy,
- halogen,
- $-N(R_{11})_2$,
- $-C(O)-C_{1-10}$ alkyl,
- $-C(O)-O-C_{1-10}$ alkyl,
- $-N(R_{11})-C(O)-C_{1-10}$ alkyl,
- aryl,
- heteroaryl,
- heterocyclyl,
- $-C(O)$ -aryl, and
- $-C(O)$ -heteroaryl;

wherein:

Y'' is $-O-$ or $-S(O)_{0,2}-$; and

$R_{1,1}$ is selected from the group consisting of hydrogen, C_{1-10} alkyl, and C_{2-10} alkenyl.

42. The compound or salt of claim 4 wherein R_2 is selected from the group consisting of hydrogen, hydroxymethyl, C_{1-4} alkyl, and C_{1-4} alkyl- $O-C_{1-4}$ alkenyl.

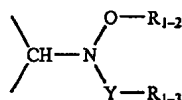
43. The compound or salt of claim 4 wherein X is selected from the group consisting of $-(CH_2)_{1-6}-$, $-CH_2C(CH_3)_2-$, $-CH_2C(CH_3)_2CH_2-$, $-(CH_2)_2OCH_2-$, and $-(CH_2)_3OCH_2-$.

44. The compound or salt of claim 4 wherein $R_{1,1}$ is selected from the group consisting of hydrogen, C_{1-4} alkyl, and phenyl.

45. The compound or salt of claim 4 wherein $R_{1,2}$ is selected from the group consisting of hydrogen, C_{1-4} alkyl, benzyl, and pyridin-2-ylmethyl.

46. The compound or salt of claim 4 wherein Z is $-C(=N-O-R_{1,2})-$.

47. The compound or salt of claim 4 wherein Z is



48. The compound or salt of claim 4 wherein $R_{1,3}$ is selected from the group consisting of hydrogen, C_{1-6} alkyl, 1-pyrrolidinyl, phenyl, 2-chlorophenyl, 3-chlorophenyl, 4-chlorophenyl, *o*-tolyl, *m*-tolyl, *p*-tolyl, and pyridin-3-yl.

49. The compound or salt of claim 4 wherein Y is selected from the group consisting of:

- $-C(O)-$,
- $-C(O)-O-$,
- $-S(O)_2-$,
- $-C(O)-N(R_8)-$, and
- $-C(S)-N(R_8)-$.

50. The compound or salt of claim 49 wherein R_8 is H or CH_3 .

51. The compound or salt of claim 5 wherein n' is 0.

52. The compound or salt of claim 5 wherein R_2 is selected from the group consisting of hydrogen, hydroxymethyl, C_{1-4} alkyl, and C_{1-4} alkyl- $O-C_{1-4}$ alkenyl.

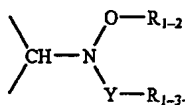
53. The compound or salt of claim 5 wherein X is selected from the group consisting of $-(CH_2)_{1-6}-$, $-CH_2C(CH_3)_2-$, $-CH_2C(CH_3)_2CH_2-$, $-(CH_2)_2OCH_2-$, and $-(CH_2)_3OCH_2-$.

54. The compound or salt of claim 5 wherein $R_{1,1}$ is selected from the group consisting of hydrogen, C_{1-4} alkyl, and phenyl.

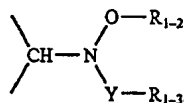
55. The compound or salt of claim 5 wherein $R_{1,2}$ is selected from the group consisting of hydrogen, C_{1-4} alkyl, benzyl, and pyridin-2-ylmethyl.

56. The compound or salt of claim 5 wherein Z is $-C(=N-O-R_{1,2})-$.

57. The compound or salt of claim 5 wherein Z is

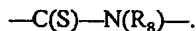
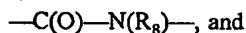
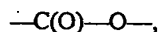
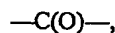


67. The compound or salt of claim 6 wherein Z is



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58. The compound or salt of claim 5 wherein R_{1-3} is selected from the group consisting of hydrogen, C_{1-6} alkyl, 1-pyrrolidinyl, phenyl, 2-chlorophenyl, 3-chlorophenyl, 4-chlorophenyl, *o*-tolyl, *m*-tolyl, *p*-tolyl, and pyridin-3-yl.

59. The compound or salt of claim 5 wherein Y is selected from the group consisting of:



60. The compound or salt of claim 59 wherein R_8 is H or CH_3 .

61. The compound or salt of claim 6 wherein m and n' are both 0.

62. The compound or salt of claim 6 wherein R_2 is selected from the group consisting of hydrogen, hydroxymethyl, C_{1-4} alkyl, and C_{1-4} alkyl-O- C_{1-4} alkylenyl.

63. The compound or salt of claim 6 wherein X is selected from the group consisting of $-(\text{CH}_2)_{1-6}-$, $-\text{CH}_2\text{C}(\text{CH}_3)_2-$, $-\text{CH}_2\text{C}(\text{CH}_3)_2\text{CH}_2-$, $-(\text{CH}_2)_2\text{OCH}_2-$, and $-(\text{CH}_2)_3\text{OCH}_2-$.

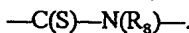
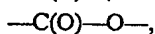
64. The compound or salt of claim 6 wherein R_{1-1} is selected from the group consisting of hydrogen, C_{1-4} alkyl, and phenyl.

65. The compound or salt of claim 6 wherein R_{1-2} is selected from the group consisting of hydrogen, C_{1-4} alkyl, benzyl, and pyridin-2-ylmethyl.

66. The compound or salt of claim 6 wherein Z is $-\text{C}(=\text{N}-\text{O}-\text{R}_{1-2})-$.

68. The compound or salt of claim 6 wherein R_{1-3} is selected from the group consisting of hydrogen, C_{1-6} alkyl, 1-pyrrolidinyl, phenyl, 2-chlorophenyl, 3-chlorophenyl, 4-chlorophenyl, *o*-tolyl, *m*-tolyl, *p*-tolyl, and pyridin-3-yl.

69. The compound or salt of claim 6 wherein Y is selected from the group consisting of:



70. The compound or salt of claim 69 wherein R_8 is H or CH_3 .

71. A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 3 in combination with a pharmaceutically acceptable carrier.

72. A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of claim 3 to the animal.

73. A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 4 in combination with a pharmaceutically acceptable carrier.

74. A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of claim 4 to the animal.

75. A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 5 in combination with a pharmaceutically acceptable carrier.

76. A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of claim 5 to the animal.

77. A pharmaceutical composition comprising a therapeutically effective amount of a compound or salt of claim 6 in combination with a pharmaceutically acceptable carrier.

78. A method of inducing cytokine biosynthesis in an animal comprising administering an effective amount of a compound or salt of claim 6 to the animal.

* * * * *



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	Art Unit	1625
	Examiner Name	D. M. M. Seaman
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